



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,564	07/30/2002	Vincent Costes	3401-4035	6868
27123	7590	04/26/2005	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			CHANG, AUDREY Y	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 04/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/070,564

Applicant(s)

COSTES, VINCENT

Examiner

Audrey Y. Chang

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 November 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 28, 2005 has been entered.

2. This Office Action is also in response to applicant's amendment filed on November 22, 2004, which has been entered into the file.

3. By this amendment, the applicant has amended claims 1-7.

4. Claims 1-7 remain pending in this application.

5. The rejections to claims 1-7 under 35 USC 112, first paragraph, with regard to newly added matters set forth in the previous Office Action are *withdrawn* in response to applicant's amendment.

### *Drawings*

6. The drawings were received on November 22, 2004. These drawings are NOT Acceptable. The incident angles are referred to the primary mirror and should be indicated on the drawings with respect to the primary mirror.

### *Response to Amendment*

7. The amendment filed on November 22, 2004 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: claim 1 has been amended to include the feature that "the light beams ... are focused respectively on said plurality of tertiary reflection means". The specification only gives the

Art Unit: 2872

support for the light beams to be focused on the image acquisition means but not on the plurality of tertiary refraction means. Furthermore, it is impossible for the light beams to be focused on all of the plurality of tertiary reflection means.

Applicant is required to cancel the new matter in the reply to this Office Action.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. **Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph**, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The reasons for rejection based on the newly added matters are set forth in the paragraph above.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 1-2 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the patent issued to Kadrmas (PN. 3,781,552).**

Kadrmass teaches a *multiple field of view telescope* that is capable for acquiring two images or more corresponding to a scene viewed from *two different aiming directions* (i.e. different field of view) wherein the telescope comprises a *primary mirror* (50 or 114, Figures 1 and 2), having parabolic or nearly parabolic shape, for *receiving* light beams from a target or object to be observed along *two light paths* making a *respective incident angle of plus and minus angle  $\theta$*  with respect to the *axis* of the primary mirror, and for (i.e. the primary mirror) further *reflecting* the light beams along the two light paths to a *secondary mirror* (56 or 112). The secondary mirror (56 or 112) is situated between the focal point or focus of the primary mirror and the primary mirror such that it (i.e. the secondary mirror) *further reflects* the light beams from the primary mirror via a *central opening* of the primary mirror to reach a *plurality of tertiary reflection means* (mirrors 64 and 68 in Figure 1 or 92 and 94 in Figure 2). The plurality of tertiary reflection means is *symmetrically* disposed about the optical axis of the primary mirror and is on a side of the primary mirror that is opposite from the side of the primary mirror on which the secondary mirror is disposed. Kadrmass teaches that photo-sensors (72 or 96) are used as the *image acquisition means* to receive the image information from the target or object, (please see Figures 1 and 2 and columns 4-5).

Kadrmass teaches that the plurality of tertiary reflection means is capable of *focusing* the light beams to the photo-sensors but this reference does not teach explicitly that the light beams are also focused *on* the plurality of tertiary reflection means. However this feature is *not supported by the specification*. Since the function of the plurality of tertiary reflection means of the cited reference achieves the *same function* as of the instant application namely receiving the light beams from the secondary mirror and reflecting and focusing them to the photo-sensors, whether the light beams are also focused on the mirror means itself is therefore not critical. Furthermore, it is impossible for the light beams to be focused on the plurality of tertiary reflection means, (all of them), since it simply will not

Art Unit: 2872

work and will not focus the light beams to the image acquisition means. This feature therefore cannot be further addressed.

With regard to claim 2, the reflection of the light beams by the secondary mirror is symmetrically with respect to the optical axis of the primary mirror, (please see Figure 2).

With regard to claim 5, the primary mirror includes a central opening (please see Figures 1 and 2) to allow the reflected light beams from the secondary mirror to pass through.

With regard to claim 6, as demonstrated by Figures 1 and 2, the secondary mirror forms two intermediate images (superimposing) near the central opening of the primary mirror. Although these images are not at the central opening exactly such modification would have been obvious as an obvious design choice to one skilled in the art since it does not affect the function of the telescope at all.

With regard to claim 7, the telescope is an observation system.

#### *Allowable Subject Matter*

12. The following is a statement of reasons for the indication of allowable subject matter: of the prior art references considered none has disclosed an observation device for acquiring two images corresponding to a scene viewed from *two different aiming directions* wherein the observation device comprises a *primary mirror*, a *secondary mirror* and a *plurality of tertiary reflection means*, where the primary mirror is receiving light beams of an object to be observed along two respective angles of incidence  $\theta$  and  $-\theta$ , ( $\theta$  being non-zero angle) with respect to the optical axis of the primary mirror, *as set forth in the claim combinations* wherein the plurality of tertiary reflection means *comprises two plane mirrors* and *two corresponding concave mirrors* disposed symmetrically at either side of the optical axis of the primary mirror, as set forth in the claim combination in claim 3. In a different embodiment, the plurality of tertiary reflection means comprises two concave mirrors disposed symmetrically with respect

Art Unit: 2872

to the optical axis of the primary mirror and a plane mirror is centered on the optical axis and extended perpendicular to the optical axis, as set forth in the claim combination of claim 4.

*Response to Arguments*

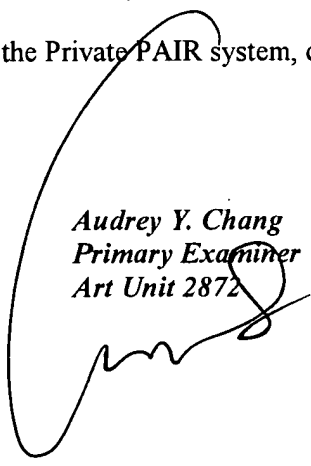
13. Applicant's arguments with respect to claims 1-7 are have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Audrey Y. Chang whose telephone number is 571-272-2309. The examiner can normally be reached on Monday-Friday (8:00-4:30), alternative Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Audrey Y. Chang*  
*Primary Examiner*  
*Art Unit 2872*



A. Chang, Ph.D.